What is claimed is:

1. A method of manufacturing an electromagnetic interference shield comprising the steps of:

(1) preparing a substrate and at least one target module, and mounting them in a sputtering chamber, wherein each target module has a target bonded thereto, and said target is made from an electrically conductive material;

(2) evacuating the sputtering chamber to a predetermined degree of vacuum;

(3) introducing a working gas into the sputtering chamber to a predetermined gas pressure level;

(4) applying a voltage to the target module using a power supply, thus activating a magnetron sputtering process between the target module and the substrate, and depositing at least one electrically conductive layer from the target module onto the substrate until a desired thickness is achieved on the substrate.

2. The method as claimed in claim 1, wherein said degree of vacuum is to be controlled in a range of 10^{-8} to 10^{-4} torr.

3. The method as claimed in claim 1, wherein said gas pressure level is maintained in a range of 10^{-3} to 10^{-1} torr.

4. The method as claimed in claim 1, wherein a flow rate of said working gas is controlled to be between 2 and 80 SCCM.

5. The method as claimed in claim 1, wherein said power source is a direct current power source.

6. The method as claimed in claim 1, wherein said voltage between the target module and the substrate is in a range between 200 and 1000 volts, and a power density of the target is in a range between 20 and 70 W/cm^2.

7. The method as claimed in claim 1, wherein said electrically conductive layer is a metal layer.

8. The method as claimed in claim 7, wherein the target is made from nickel.

9. The method as claimed in claim 7, wherein the target is made from copper.

10.The method as claimed in claim 7, wherein the target is made from stainless steel.

11. The method as claimed in claim 1, wherein the target is a composite target, which is divided into a plurality of portions, each portion being made from different electrically conductive materials.

12. The method as claimed in claim 11, wherein said composite target is divided into three portions respectively made from nickel, copper and stainless steel.

13.The method as claimed in claim 1, wherein said substrate is made from resin.

14.The method as claimed in claim 13, wherein said resin has at least one component selected from the group of polyvinyl chloride, polyethylene terephthalate, acrylonitrile-butadiene-styrene, polycarbonate, polyimide, polyetherimide, polyphenylene sulfide, polysulfone, polystyrene, glycol-modified polyester, polypropylene, and liquid crystal polymers.

15. A method of manufacturing an electromagnetic interference shield comprising the steps of:

(1) preparing a substrate and at least one target module, and mounting them in a sputtering chamber, wherein each target module has a target bonded thereto, and said target is made from an electrically conductive material;

(2) controlling the chamber in a designated air pressure level; and

(3) applying a voltage to the target module using a power supply, thus activating a magnetron sputtering process between the target module and the substrate, and depositing at least one electrically conductive layer from the target module onto the substrate until a desired thickness is achieved on the substrate.